EXHIBIT 7

IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF DELAWARE

BOSTON SCIENTIFIC CORPORATION and BOSTON SCIENTIFIC SCIMED, INC., Plaintiffs, v. CONOR MEDSYSTEMS, INC., Defendant.	)	C.A. No. 05-768-SLR

REBUTTAL EXPERT REPORT
OF PROFESSOR JAMES E. MOORE JR., PH.D.

Pursuant to the Federal Rules Of Civil Procedure and this Court's Amended Rule16 Scheduling Order, the following is my written rebuttal expert report detailing additional subject matter areas and opinions about which I expect to testify at trial.

they do not actually disclose connectors attached to corners within the meaning of Claim 35 of the Jang '021 patent, such analysis is irrelevant.

40. Furthermore, throughout their expert reports, Drs. Buller and Solar assert that it would have been obvious to a person of ordinary skill in the art to modify a reference without explaining how such a person would be motivated to do so. For example, the only grounds Dr. Buller gives for disconnecting and moving certain stent components disclosed in the '161 patent is that such changes would be "an obvious design choice." The facts contradict that conclusion, however, as no one made this choice in connection with a stent in the prior art of the type claimed by Claim 35. Also, for references that do not disclose the upper-to-lower corner, curvilinear connection scheme required by Claim 35 of the Jang '021 patent, Drs. Buller and Solar merely state that it would have been obvious to incorporate such a scheme, citing the benefits it would provide. My understanding from counsel is that obviousness requires evidence that a person of ordinary skill would have been motivated to modify the prior art and would have had a reasonable expectation of success with respect to the design changes at issue. It is my opinion that the conclusory statements made by Drs. Buller and Solar do not provide such evidence.

41. Stent design is not an easily predictable process today and was even less predictable as of the relevant time period. A given stent design represents a balance of various design goals. Seemingly minor changes can impact a stent's performance in drastic ways by upsetting this balance. For example, even slight alterations in the connection points of a stent can impact, *inter alia*, cell size, metal content, foreshortening, tuliping[3] and strut twisting. This

[3] *See* Brian Brown March 9, 2007 Deposition Tr. at 93-94.

principle is aptly demonstrated by the Jang '021 patent itself. The '021 patent explains how seemingly minor shifts in the location of the attachment point between the connectors and the joining struts are associated with significant functional differences. *See* Exhibit E at col. 9:31-41, 14:10-21. *See also* David Fischell March 15, 2007 Deposition Tr. at 47-50. To the extent that Drs. Buller and Solar use Claim 35 of the Jang '021 patent as a roadmap for modifying prior art references — rather than considering if there was any motivation to make the modification or any expectation of success in doing so — their analysis is not relevant to the question of validity.

42. None of the references relied upon by Drs. Buller, Solar and Richter, whether considered separately or in combination, would have disclosed or rendered obvious the limitations of Claim 35 of the Jang '021 patent to one of ordinary skill in the art as of the relevant time frame.

The '417 Patent

43. Claim 35 of the Jang '021 patent is neither anticipated nor rendered obvious by the '417 patent, whether taken alone or in combination with any other reference relied upon by Drs. Buller, Solar and Richter, for a number of reasons.

44. The '417 patent discloses "a plurality of expandable and deformable intraluminal vascular grafts," or "tubular members," that are connected together by straight "connecting members." *See, e.g.*, '417 patent at Abstract. Consistent with the Court's earlier construction of the claims of the related U.S Patent No. 4,739,762 to Palmaz in *Cordis Corporation v. Medtronic Ave, Inc.*, Civil Action No. 97-550-SLR (D. Del.), each of these "grafts" or tubular members" are independently functional stents that are "capable of serving to prevent a body passageway from collapsing." Exhibit 7 at 331. *See also* '417 patent at col. 6:20-54, col. 8:60-64.

of the references relied upon by Drs. Buller, Solar and Richter, did not anticipate or render obvious Claim 35 of the Jang '021 patent as of the relevant time frame.

84. Moreover, the disclosures of the '210 patent are similar to the disclosures of other references discussed herein, including those references considered during the prosecution of the Jang '021 patent. The expert reports of Drs. Buller and Solar are in agreement that the '210 patent does not disclose any limitations of Claim 35 of the '021 patent that would not have been disclosed by the cited references under their interpretation of the prior art.

85. The PTO's consideration of the disclosure of these references and decision to grant the Jang '021 patent over these references is consistent with my opinion that the '210 patent does not disclose the invention of Claim 35 or render it obvious and is not material to its patentability.

The '303 Patent

86. Claim 35 of the Jang '021 patent is neither anticipated nor rendered obvious by the '303 patent, whether taken alone or in combination with any other reference relied upon by Drs. Buller, Solar and Richter, for a number of reasons.

87. The '303 patent fails to disclose, at a minimum, the upper-to-lower corner, curvilinear connection scheme claimed in Claim 35 of the Jang '021 patent. Indeed, that reference teaches away from such a connection, as it discloses a stent comprised of a number of continuous horizontal and vertical meander patterns. *See, e.g.*, '303 patent at col. 1:55-60. The '303 patent further discloses that when the stents claimed by the '417 expand, the "helical connectors twist," which is "probably harmful to the blood vessel" whereas a "straight member" that is "parallel to the longitudinal axis" of the stent "removes the twisting motion" *See* '303 patent at col 1:40-48. In order to meet the limitations of Claim 35 of the Jang '021 patent, one of ordinary skill in the art would have to disconnect and move various portions of the horizontal

meander patterns of the '303 patent, thereby contradicting the teachings of the '303 patent. Figure 6 of the '303 patent does not disclose a corner-to-corner connection scheme. As the patent states, Figure 6 is merely a schematic of Figure 7, which decidedly does not have a corner-to-corner connection scheme. *See* '303 patent 4:41-42.

88. One of ordinary skill in the art would have to contradict the teachings of the '303 patent in order to arrive at the subject matter claimed in Claim 35 of the Jang '021 patent without disturbing the horizontal meander patterns of the '303 patent. The '303 patent discloses only expansion columns that are 180 degrees out-of-phase and specifically states that the "even and odd first meander patterns are 180° out of phase with each other." *See, e.g.*, '303 patent at col. 1:63-64; Figures 1-4, 6-8. Indeed, the '303 patent teaches away from in-phase designs. The '303 patent prefers that the "loop[s]" of the stent that are aligned along the longitudinal axis be "generally opposite to one another." *See, e.g.*, '303 patent at col. 5:9-13, 5: 38-62. This orientation aids in the mechanism disclosed in the '303 patent for minimizing foreshortening and can only be achieved if the vertical meander patterns are 180 degrees out-of-phase with each other.

89. Disconnecting and flipping certain of the vertical meander patterns of the '303 patent, as Dr. Buller has done in his expert report, results in loops aligned along the longitudinal axis that are not "generally opposite to one another," thereby contradicting the teachings of the '303 patent. There is therefore no way for one of skill in the art to arrive at the subject matter claimed in Claim 35 of the Jang '021 patent without violating the explicit teachings of the '303 patent.

90. The connection scheme of the Jang '021 patent provides benefits nowhere disclosed in the '303 patent, including but not limited to an overall increase in connector length,

lever arm length and ability to deform more easily in response to applied axial torque, which promotes longitudinal flexibility. Much like the analysis comparing Claim 35 of the Jang '021 patent to the '417 patent, because the connecting struts run in a substantially linear fashion from one expansion column to the next, the structure of the '303 patent deforms in response to axial torque primarily by the elongation (strain) of the connectors.

91. This is an important difference between the structure of the '303 patent and the structure of Claim 35 of the Jang '021 patent. Furthermore, much like the analysis comparing Claim 35 of the Jang '021 patent to the '373 patent, a stent with points of connection between successive connectors and expansion columns aligned along the same longitudinal axis, as shown in the '303 patent, will suffer from a "backbone" effect where the connection points locally increase the resistance to extension or compression. This is another important difference between the structure of the '303 patent and the structure of Claim 35 of the Jang '021 patent.

92. These shortcomings in the '303 patent are nowhere corrected or avoided by reference to any of Conor's other cited materials.

93. In light of the above, and because the '303 patent teaches away from the subject matter claimed in Claim 35 of the Jang '021 patent, one of ordinary skill in the art would have concluded that the '303 patent, whether considered alone or in combination with any or all of the references relied upon by Drs. Buller, Solar and Richter, did not anticipate or render obvious Claim 35 of the Jang '021 patent as of the relevant time frame.

94. The '303 patent (in the form of WO96/03092, which contains essentially the same disclosure) was before the patent examiner during prosecution of the Jang '021 patent, which confirms my opinion that the '303 patent neither anticipates nor renders obvious that claim. It is worth noting that Dr. Buller has previously agreed that the disclosure of the '303

patent is the same as that in the cited '092 application in terms of the inventions embodied in the Jang '021 patent. *See* Exhibit 13 at 1287, 1363-64.

The NIR Stent

95. Claim 35 of the Jang '021 patent is neither anticipated nor rendered obvious by the NIR stent, whether taken alone or in combination with any other reference relied upon by Drs. Buller, Solar and Richter, for a number of reasons. The NIR stent is an embodiment of the '303 patent. *See* Ex. 18. Accordingly, Claim 35 of the Jang '021 patent is neither anticipated nor rendered obvious by the NIR stent, whether taken alone or in combination with any other reference relied upon by Drs. Buller, Solar and Richter, for the same reasons that the '303 patent neither anticipates nor renders obvious that claim.

The '161 Patent

96. Claim 35 of the Jang '021 patent is neither anticipated nor rendered obvious by the '161 patent, whether taken alone or in combination with any other reference relied upon by Drs. Buller, Solar and Richter, for a number of reasons.

97. For example, the '161 patent fails to teach or suggest a connector having a proximal section, a distal section and an intermediate section that is non-parallel to the proximal and distal sections, as required by Claim 35 of the Jang '021 patent. Rather, as can be seen from Figures 13, 14, 15, 17, 18, 19, 20A, 20B, 21, 22 and 28 of the '161 patent, the "longitudinal connections" between "adjacent radial rings" are substantially straight. In fact, the patent teaches away from a flexible curvilinear connector having an intermediate section that is non-parallel to the proximal and distal sections, as required by Claim 35 of the Jang '021 patent. For example, the '161 patent discloses a stent that, upon expansion, "transform[s] into a cylinder comprised of substantially rigid rectangular grid geometry" in order to achieve "maximum rigidity, after the stent is expanded to its final large diameter, for supporting the body vessel wall." *See, e.g.*, '161

patent because such a connection scheme results in longer connectors that ***increase*** metal content.

104. The connection scheme of the Jang '021 patent provides benefits nowhere disclosed in the '161 patent, including but not limited to an overall increase in connector length, lever arm length and ability to deform more easily in response to applied axial torque, which promotes longitudinal flexibility. Much like the analysis comparing Claim 35 of the Jang '021 patent to the '417 patent, because the connecting struts run in a substantially linear fashion from one expansion column to the next, the structure of the '161 patent deforms in response to axial torque primarily by the elongation (strain) of the connectors. This is an important difference between the structure of the '161 patent and the structure of Claim 35 of the Jang '021 patent.

105. Furthermore, much like the analysis comparing Claim 35 of the Jang '021 patent to the '373 patent, a stent with points of connection between successive connectors and expansion columns aligned along the same longitudinal axis, as shown in the '161 patent, will suffer from a "backbone" effect where the connection points locally increase the resistance to extension or compression. This is another important difference between the structure of the '161 patent and the structure of Claim 35 of the Jang '01 patent.

106. These shortcomings in the '161 patent are nowhere corrected or avoided by reference to any of Conor's other cited materials.

107. In light of the above, and because the '161 patent teaches away from the subject matter claimed in Claim 35 of the Jang '021 patent, one of ordinary skill in the art would have concluded that the '161 patent, whether considered alone or in combination with any or all of the references relied upon by Drs. Buller, Solar and Richter, did not anticipate or render obvious Claim 35 of the Jang '021 patent as of the relevant time frame.

108. The fact that the patent examiner for the Jang '021 patent allowed Claim 35 over the '161 patent further confirms my opinion that the '161 patent neither anticipates nor renders obvious that claim.

The '569 Patent

109. Claim 35 of the Jang '021 patent is neither anticipated nor rendered obvious by the '569 patent, whether taken alone or in combination with any other reference relied upon by Drs. Buller, Solar and Richter, for a number of reasons.

110. The '569 patent fails to disclose, at a minimum, the upper-to-lower corner, curvilinear connection scheme required by Claim 35 of the Jang '021 patent. Indeed, that reference teaches away from such a connection.

111. The '569 patent states that "twist[ing] of the component segments such that they extend into the flowpath of the artery or vein . . . causes turbulence which is undesirable." *See* '569 patent at col. 3:22-25. The '559 patent further discloses a stent design intended to alleviate such twisting, in particular by reducing the tendency of the "reversing bends" to bend away from the circumferential plane upon expansion, as depicted in Figures 9 and 10 of that patent. *See id.* at col. 3:63-4:5; 5:20-24; 5:38-57. Given this teaching, one of ordinary skill in the art would not be motivated to use the upper-to-lower corner, curvilinear connection scheme claimed by the '021 patent with the stent claimed by the '569 patent because such a connection scheme would have been associated with strut twisting during the relevant time period. *See* '373 patent at col. 35-44; '303 patent at col 1:40-48; Opening Expert Report Of Nigel Buller at 38.

112. The ‘569 patent teaches that the maximum benefit with respect to securing the "reversing bends" in order to prevent them from bending away from the circumferential plane upon expansion is achieved when connectors are attached to apices of the "reversing bends," as the '569 patent illustrates. *See, e.g.*, '569 patent at Figures 1, 2, 11. In order to arrive at the stent

claimed by Claim 35 of the Jang '021 patent, one of ordinary skill in the art would first have to disconnect and move the connectors, as Dr. Buller has done in his expert report. One of ordinary skill in the art would not be motivated to make such a change. Next, one of ordinary skill in the art would have to contradict the teachings of the '569 patent and disconnect and move the connectors away from the apices of the "reversing bends," as Dr. Buller suggests doing in his expert report.

113. Even if one of ordinary skill in the art were motivated "to make the connection struts' points of connection to the expansion columns the maximum distance apart," as Dr. Buller suggests, in light of the teachings of the '569 patent, one of ordinary skill in the art would connect the connectors to the apices of "reversing bends" that are further apart circumferentially or longitudinally rather than move the connectors away from the apices of the "reversing bends."

114. I understand that Dr. Buller has opined that it would have been obvious for one of ordinary skill in the art to substitute the "top-to-bottom" or "first-corner-to-second-corner connections" disclosed in the '417 and '210 patents. However, one of ordinary skill in the art would not have been motivated to combine the stent of the '569 patent with these references for a number of reasons. For example, the stent of the '569 patent is comprised of expansion columns. One of ordinary skill would thus not be motivated to substitute the elements of the '417 and '210 patents, which both disclose tubular members, for the reasons discussed above at paragraphs 45-46, 49-51. Moreover, as discussed above, the '569 patent teaches away from the top-to-bottom, curvilinear connection scheme required by Claim 35 of the Jang '021 patent. Therefore, to the extent that the '417 and '021 patent teach such a scheme, one of ordinary skill in the art would

not be motivated to combine these patents with the '569 patent.[7] In any event, the '569 patent discloses connectors (not articulations) and thus one of ordinary skill in the art would not be motivated to substitute the articulations disclosed by the '210 patent for the reasons discussed above at paragraph 38.

115. Even if one of ordinary skill in the art were motivated to combine the stent of the '569 patent with any the references discussed above, such combinations would still fail to disclose connecting struts that join adjacent expansion columns using a corner-to-corner connection scheme, much less the upper-to-lower corner, curvilinear connection scheme required by Claim 35 of the '021 patent.

116. These shortcomings in the '569 patent are nowhere corrected or avoided by reference to any of Conor's other cited materials.

117. In light of the above, and because the '569 patent teaches away from the subject matter claimed in Claim 35 of the Jang '021 patent, one of ordinary skill in the art would have concluded that the '569 patent, whether considered alone or in combination with any or all of the references relied upon by Drs. Buller, Solar and Richter, did not anticipate or render obvious Claim 35 of the Jang '021 patent as of the relevant time frame.

The '065 Patent

118. Claim 35 of the Jang '021 patent is neither anticipated nor rendered obvious by the '065 patent, whether taken alone or in combination with any other reference relied upon by Drs. Buller, Solar and Richter, for a number of reasons.

[7] It is my opinion that the '417 and '210 patents fail to disclose the top-to-bottom, curvilinear scheme required by Claim 35 of the Jang '021 patent. *See supra* paragraphs 73-81, 149-51.

160. My understanding is that secondary considerations may support or rebut, for one consideration, the nonobviousness of a claim. According to the Proposed Delaware Uniform Jury Instructions, such secondary considerations include, among other things, any "long felt need in the art that was satisfied by the invention", "the failure of others to make the invention," any "commercial success or lack of commercial success of products covered by the patents in suit" and "copying of the invention by others in the field." Exhibit 14 at § 4.8.6.

161. The nonobviousness of Claim 35 of the Jang '021 patent is supported by the long-felt need in the art for a closed-cell stent with improved flexibility, including a stent with a connector that improved flexibility while maintaining the radial strength of the stent and that allowed stent designers to connect all of the expansion strut pairs. With respect to this last point, I would note that Cordis employee Brian Firth testified in the *Cordis* action that it is very important to have connections between all of the expansion strut pairs. *See* January 12, 2005 Deposition Tr., attached hereto as Exhibit 15, at 230-31; 494-95; 497.

162. Although the possibility of using connectors to improve flexibility of certain stent designs was known to those in the art of stent technology in 1996, the industry struggled to develop a stent that would overcome the disadvantages, such as the lack of sufficient flexibility of longer stents, associated with the prior art, including stents having connections between all of the expansion strut pairs. *See* Brian Brown March 9, 2007 Deposition Tr. at 16-19. Many stents were proposed, and failed, prior to Dr. Jang's invention. *See, e.g.*, BX stent.

163. The upper-to-lower-corner, curvilinear connection scheme required by Claim 35 of the Jang '021 patent is a unique design that increases the flexibility and deliverability of the stent while maintaining adequate radial strength, without increasing the cell size of the stent and without compromising its length. By attaching multi-section, curvilinear connectors from the

lower corner to the upper corner of the adjacent expansion strut pairs, that connection scheme elongates the length of the connector, increases its lever arm length, and enhances its ability to deform in response to an applied axial torque, thus increasing the flexibility of the stent. *See, e.g.*, Opening Expert Report Of Nigel Buller at 13-14, 37; Opening Expert Report Of Ronald J. Solar at 13-14. The Jang '021 patent connection scheme achieves all of these benefits while connecting all strut pairs, which avoids flares and other uneven surfaces on the stent during delivery.

164. I understand from certain testimony from the *Cordis* action, of David Majercak, the designer of Cordis' Bx VELOCITY stent, and Dr. Brian Firth, who was Vice President of Research and Development during the development of the Bx VELOCITY stent, that the original connection scheme of the BX Velocity stent had connectors attached to the apices of its joining struts. I further understand from their testimony that Cordis abandoned this connection scheme in mid- to late-1998, when it adopted the lower-to-upper-corner, curvilinear connection scheme required by Claim 36 of the Jang '021 patent. *See*, *e.g.*, Majercak January 13, 2005 Deposition Tr., attached hereto as Exhibit 16, at 27-28. I also understand that Cordis subsequently filed a patent application directed to, among other things, its modification of the connection scheme of the original design (*id.* at 150-151) to match the connection scheme of Claim 36 of the Jang '021 patent, which application ultimately resulted in the '403 patent, discussed above.

VI. COMPENSATION

178. As stated in my initial expert report, I am being compensated for the time I have spent on this litigation at my customary rate of $450 per hour. My compensation does not depend in any way upon the outcome of this litigation.

Dated: April 12, 2007

James E. Moore Jr., Ph. D.

EXHIBIT 8

- VOLUME C -

IN THE UNITED STATES DISTRICT COURT

IN AND FOR THE DISTRICT OF DELAWARE

- - -

BOSTON SCIENTIFIC CORPORATION, : CIVIL ACTION
Plaintiff :
vs. :
CORDIS CORPORATION and JOHNSON & JOHNSON, INC., :
Defendants : NO. 03-27 (SLR)

BOSTON SCIENTIFIC SCIMED, INC., and BOSTON SCIENTIFIC CORPORATION, : CIVIL ACTION
Plaintiffs :
vs. :
CORDIS CORPORATION and JOHNSON & JOHNSON, INC., :
Defendants : NO. 03-283 (SLR)

- - -

Wilmington, Delaware
Thursday, June 23, 2005
9:33 o'clock, a.m.

- - -

BEFORE: HONORABLE SUE L. ROBINSON, Chief Judge, and a jury

- - -

Valerie J. Gunning and
Leonard A. Dibbs,
Official Court Reporters

APPEARANCES:

ASHBY & GEDDES
BY: STEVEN J BALICK, ESQ and
JOHN G DAY, ESQ.

-and-

PATTERSON, BELKNAP, WEBB & TYLER LLP
BY: GREGORY L. DISKANT, ESQ.,
MICHAEL TIMMONS, ESQ.
EUGENE GELERNTER, ESQ.,
KIM J LANDSMAN, ESQ.,
SCOTT HOWARD, ESQ and
THOMAS PIPPERT, ESQ
(New York, New York)

-and-

JOHNSON & JOHNSON
BY: ERIC HARRIS, ESQ.

Counsel for Cordis Corporation

YOUNG, CONAWAY, STARGAT & TAYLOR
BY: JOSY W INGERSOLL, ESQ

-and-

BOUCHARD, MARGULES & FRIEDLANDER, P.A.
BY: KAREN L. PASCALE, ESQ

-and-

APPEARANCES (Continued):

KENYON & KENYON
BY: RICHARD DeLUCIA, ESQ.,
THOMAS MELORO, ESQ. and
ELIZABETH GARDNER, ESQ
(New York, New York)

-and-

KIRKLAND & ELLIS
BY: JOHN DESMARAIS, ESQ. and
PETER J ARMENIO, ESQ
(New York, New York)

Counsel for Boston Scientific Corporation

- - -

PROCEEDINGS

(Proceedings commenced at 9:33 a.m., and the following occurred without the presence of the jury.)

THE COURT: Good morning.

MR. DISKANT: Good morning, your Honor.

MR. DeLUCIA: Your Honor, just a matter of business to state for the record.

Mr. Fischell, who's the first witness being taken out of order, in order to accommodate that, we've reached, I believe, an understanding with opposing counsel that Mr. Fischell, who was only identified as a witness in the Jang case, will be testifying in the Jang case, and we trust and have discussed that there will be no evidence offered relevant to the Helmus and Ding patent.

With that, we're just making that statement for the record, preserving our right to object. We expect -- we're trying to cooperate and minimize the hoop-de-do. Thank you.

MR. DISKANT: That's absolutely correct.

Let me hand up a package of materials and then I will explain the issue that Mr. Desmarais raised

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called Isostent, in California.
Q. Okay. And ultimately -- let's go back to the engineering drawing, the BX Velocity. What shape -- I'm going to ask you about the -- the shape that you ended up choosing for the red connectors in the BX Velocity design.
A. Yes.
Q. And what shape did you choose?
A. That's that N or letter N shape.
Q. And what are the benefits of that shape?
A. The primary benefit is a very long length of metallic structure, lots of curves, and sort of long legs. You see the three long legs here. And that makes this a very flexible connector because it makes it easy for it to open and close. In other words, as the rings pull on it, as it's going around the bend, it's easy for the rings to pull it apart on the outside of the bend and it's very soft, so it's easy for the rings to push it together on the inside of the bend.
Q. And focusing on the end points of the connectors, what orientation did you select for the end points of the connectors?
A. The end points of this connector are connected on the circular arc between the center and where the circular arc connects to the straight segment. And so

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in this case, it's going from the lower left to upper right, a diagonal connection pattern.
Q. And is that similar in any way to the design that you worked with in 1996?
A. Yes. Very similar.
Q. The connector running from the lower left to the upper right, what are the benefits that you achieve by that orientation?
A. The primary benefit is it allows you to fit this very long connector into a -- what you can see, here is a pretty tight space between these crowns. And if I had to connect it in the center, I would have to push the crowns apart.
Remember I said that having a good mesh, sort of a fine mesh to hold that -- that gunk in the artery back is very important. And if you make a big -- bigger holes, there's more potential that the gunk or the plaque will push through the stent wires and not give you as good a result or as safe a result for the patient.
So by connecting off-center here, what we were able to do is put a very flexible connector without having to spread the rings apart very far.
Q. Whose idea was having the offset connector?
A. David Majercak at Cordis.

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Q. Okay. Okay. Dr. Fischell, when is the first time you ever heard of David Jang?
A. About a month ago.
Q. Before then, you had never heard of Dr. Jang?
A. No, never heard of him.
Q. Did Dr. Jang have anything to do with the design of the BX Velocity?
A. Nothing to do whatsoever.
MR. GELERNTER: Thank you very much. Nothing further.
THE COURT: All right. Cross-examination, Mr. Desmarais.
MR. DESMARAIS: Yes.
CROSS-EXAMINATION
BY MR. DESMARAIS:
Q. Good morning, Dr. Fischell.
A. Good morning.
Q. Now, I think you told us about the flexibility of stents. Am I right that, as a stent designer, you agree that interventional cardiologists want a stent that's flexible; right?
- - -
A. It's one key attribute that they want.
Q. Because a stent has to go through the body, through these curvy arteries and arteries are small and make

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sharp turns; right?
A. Yes.
Q. So you know, don't you, as a stent designer, that interventional cardiologists want stents that are the most flexible so they can, such as they are, have other attributes like strength?
- - -
A. Of course.
Q. And the connectors, I think you'll agree, are important to the stent design, and I think you may have just testified to this, because it's the connectors and their design that imparts the flexibility to the stent; right?
A. In most cases.
Q. Now, the BX Velocity, Cordis began selling that in the year 2000; right?
A. In the U.S. in 2000.
Q. And am I right that even Cordis describes the BX Velocity as a quantum leap forward in stent technology because it combined the flexibility of the coil stent with the scaffolding of a slotted tube?
A. I'm not aware of that description, but they may have.
Q. But that sounds right to you; right?
A. It had a lot of flexibility at the time. That's why

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we like it.
Q. And that was the point of it, right? To beat the previous Cordis designs in flexibility; right?
A. That was one key attribute of it, yes.
Q. And the BX Velocity, I think you testified on your direct, but let me make sure, the BX Velocity you know is the base metal stent for the Cypher product, the drug-eluting stent that Cordis sells; is that right?
A. To the best of my knowledge, yes.
Q. And your BX Velocity has been well received by interventional cardiologists; right?
A. That's what I've been told.
Q. And one of the reasons you've been told it has been well received is because of the flexibility; right?
A. That is one of the reasons, yes.
Q. Now, when you were working on the design for the BX Velocity, am I right that Cordis was selling something called the Crown stent?
A. I don't remember exactly what they were selling at the time. I know the Crown was in that time frame.
Q. And you're somewhat familiar with the Crown stent, aren't you?
A. Vaguely.
MR. DESMARAIS: May I have the Elmo, please?

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BY MR. DESMARAIS:
Q. I've put up on the screen Boston Scientific Exhibit 4126.
Up at the top we see the Palmaz-Schatz; is that right?
A. That looks like the Palmaz-Schatz stent, yes.
Q. And down below is the Crown stent; right? You are familiar enough to recognize it, aren't you?
A. Looks like the Crown stent to me.
Q. And --
MR. DESMARAIS: Your Honor, I will offer Boston Scientific Exhibit 4126.
MR. GELERNTER: I'm going to object to the title, your Honor. Otherwise, we have no objection.
THE COURT: All right. And generally we don't show graphics until they've been admitted, and that would be admitted without the title.
*** (Boston Scientific Exhibit No. 4126 was received into evidence.)
BY MR. DESMARAIS:
Q. Now, you know, don't you, from your work at Cordis that the Crown stent was Cordis' attempt to come up with a stent that was more flexible than the Palmaz-Schatz; right?
A. I only know that it was Cordis' next stent offered

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in the United States. I don't -- wasn't privy to their motivations.
Q. But you do know that the Crown was Cordis' next stent after the Palmaz-Schatz stent; right?
A. In the United States, they also had a stent called the Spiral. Which was another Palmaz design offered outside the U.S. in between.
Q In the U.S. it was the Crown stent?
A. To the best of my knowledge.
Q. You know that the Crown stent didn't even sell as well as the previous Palmaz-Schatz that it was trying to improve upon; right?
A. Once again, you're asking me about impressions. Yes, I think it was not as successful as the Palmaz-Schatz stent.
Q. And you know, don't you, that one of the reasons the Crown stent wasn't as successful even as the one it was trying to be better than was because the Crown had problems with flexibility and deliverability?
A. I'm not an interventional cardiologist.
Q. But you know that, don't you?
A. It was not as flexible as doctors would have liked.
Q. Now, turning to the BX Velocity stent, the original stent that you made was actually called the BX stent, not the BX Velocity; right?

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A. I'm sorry. We made hundreds of different stent designs in the period. Which one specifically are you referring to?
Q. I would like to talk about the BX, something that you called the BX stent that had been designed in the spring of 1996.
A. Okay. We refer to it as the Isostent BX version M stent, yes.
Q. Right. You called it the BX stent; right?
A. Yes.
Q. And am I right that the design of the BX stent was finished in September of 1996? Excuse me. In the spring of 1996?
A. The design was what we call frozen. They wanted to have something to put radioactivity on and it was the design that was chosen.
Q. And it was frozen in the spring of --
A. Yes. They stopped changing that design at Isostent.
Q. And that design had S-shaped connectors; right?
A. Yes. Like that Superman S I mentioned.
Q. And they weren't offset, they were touching the crowns of the rings; right?
A. They were exactly along the longitudinal axis.
Q. Right. They weren't offset?

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Medical Affairs and Health Economics.
"Question: What is your current title?
"Answer: The same.
"Question: Dr. Firth, are you, just for the record, I know you testified to this before, you're an M.D. and a Ph.D.; is that correct?
"Answer: That's correct.
"Question: But was the BX Velocity stent commercialized by Cordis?
"Answer: Yes.
"Question: Now, that stent was used for what, by the medical field?
"Answer: It was used for the same purpose as our bare metal stents.
"Question: Which is what?
"Answer: Fundamentally to reduce restenosis and also to prevent acute closure of the vessel.
"Question: When is the first time you ever met Dr. Jang personally?
"Answer: I don't remember the precise date. Somewhere in the '95 to '97 time frame.
"Question: Okay. And did you, yourself, have any direct negotiations with Dr. Jang about any stent technology?
"Answer: I believe I -- I can recall

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meeting him. Reviewing the documents yesterday, it appears I may have met only on two occasions. I don't believe that constitutes negotiation.
"Question: Are you aware of that someone on behalf of Johnson & Johnson Cordis was negotiating with Dr. Jang in 1995 to '98 time frame?
"Answer: Yeah. Again, I'm not sure that I would even characterize it's as negotiations. There were conversations that went back and forth with multiple letters to Dr. Jang with different iterations of his ideas of stents.
"Question: Did Cordis ever consider licensing any of those designs that Dr. Jang was discussing?
"Answer: Well, again, based on what I looked at yesterday, there was this ongoing dialogue.
"Whether this actually got to the point of considering licensing or not is not clear to me.
"Question: At this time, the 1995 time frame, what was your job title?
"Answer: 1995?
"Question: Yes, please.
"Answer: VP of R&D at J&J Invention Systems.
"Question: And did bare metal stents fall

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under your research and development responsibility?
"Answer: Yes.
"Question: At that time, was there a bare metal stent on the market that the company was selling?
"Answer: Yes, indeed.
"Question: And what stent was that?
"Answer: Well, there were actually several. There were coronary stents, and there were peripheral stents that were being sold.
In the coronary area we had the Palmaz-Schatz stents and outside the U.S. In addition to that, we had the so-called spiral stent.
"Question: In your position as the head of R&D at that time, were you overseeing research and development efforts to design a stent that had improved functioning versus the Palmaz-Schatz stent?
"Answer: Yes.
"Question: And were there specific areas that you were trying to improve in your group?
"Answer: Yes. We were definitely trying to improve flexibility of the stent. But we also had certain criteria. We were very interested in maintaining the same radial force of the stent.
"And, based on all the Palmaz experience, we were very interested in obtaining a design where every

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Crown was attached to every adjacent Crown. In other words, not have unconnected internal edges.
"Question: And is that often referred to as a closed cell design when all the crowns are attached?
"Answer: By some people, yes.
"Question: Do you refer to it as a closed cell design?
"Answer: I may have.
"Question: Is the BX Velocity a closed cell design in your view?
"Answer: Insofar as it has everything connected, yes.
"Question: After the Palmaz-Schatz stent, did Cordis J&J commercialize another coronary stent before the BX Velocity?
"Answer: Yes.
"Question: What stent was that?
"Answer: The Crown stent and the Cross XLC stent and the Mini Crown stent.
"Question: Let's talk about the Crown stent.
"Answer: Yes.
"Question: Did that have improved function versus the Palmaz-Schatz stent?
"Answer: Yes, it did.
"Question: In what respect?

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"Answer: It was more flexible.
"Question: And was that perceived as a benefit by physicians who were selecting stents to use?
"Answer: Well, it was definitely more flexible, intrinsically more flexible per unit length than the Palmaz-Schatz stent. It was not as flexible as some competitors.
"Question: Did that fact, the fact that the Crown stent was not as flexible as some of the competitors lead to a dropoff in Cordis J&J's market share for bare metal stents?
"Answer: Yeah. It's not just the stent, but it was also the stent delivery system. So the stent and the stent delivery system together were somewhat less deliverable.
"And it was not as successful as we hoped having had 90-plus percent market share. There's only one way to go from that and it's down.
"Question: After the Crown stent was on the market, and you were experiencing a lower market share --
"Answer: Right.
"Question: -- than you were used to --
"Answer: Right.
"Question: -- was one of your R&D projects

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to come up with the next generation after the Crown stent?
"Answer: Well, it's an ongoing process. Constantly iterating trying to get better and better, yeah.
"Question: Is it fair to say that the goal was to obtain radial strength, a closed cell design but yet increase flexibility as compared to the Crown stent?
"Answer: That would be fair.
"Question: So by the time your team was working on the design that eventually became the BX Velocity, they knew very well that connectors were an important aspect of flexibility and, therefore, overall deliverability of the stent?
"Answer: Correct. And, indeed, we played around with 12 connectors and 10 connectors and knew there was a difference between that. And we understood connectors.
"Question: Did you have an understanding of how your team settled on the precise connector that we see depicted here in Firth Exhibit 1 for the BX Velocity?
"Answer: Well, my recollection of it is as follows. We already said that the notion of connectors and multiple connectors was already -- was well

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established and had already been reduced to practice with our spiral stent.
"And then the notion was that if one could potentially lengthen that lever arm, you might get more flexibility. The Fischells met with us, and I don't recall when the first meeting was on their stent design, with their very first generation of stent, which actually had these kind of S connectors and also had straight connectors. So they had S cells and H cells. And that was their original construct. And working with our engineers, this ultimately evolved into the stent that you see here, which got rid of the H connectors, modified these S connectors, modified their point of attachment.
"They are in diagonal connectors that go from the bottom of the one arc to the top of the adjacent arc. And these arcs are out of phase.
"Question: Do you have a general understanding of why your team, working with the Fischells, modified the points of attachment for these connectors?
"Answer: I don't know all the reasons, but certainly one of them was to get the longest lever arm. And further evolution of this has led to create an even longer level arm.

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"Question: And the level arm in this context is desirable because it increases flexibility and deliverability?
"Answer: Right, because this element is thinner than the rest of the stent.
"Question: And you mentioned that the Cordis engineers made the connector overall in its connection points a diagonal; is that right?
"Answer: Yes.
"Question: And was there a benefit to that design?
"Answer: Well, I just indicated. You end up with a longer lever arm by doing that. And that was not a new concept.
"Again, that is what we have on the spiral. We have diagonal connectors so they can be longer than just straight connectors.
"Question: Now, if we look at, on, for example, on Page 175116, as a result of the diagonal nature of the connector and the points of attachments, these points of attachments aren't at the same location circumferentially on the stent; correct?
"Answer: I think I've already said, these, in the -- what you have here is a sinusoidal member which has arcs.

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"Answer (Continuing): And the connector goes to the bottom. The lower side of the one arc to the upper side of the adjacent arc, which is a 180-degree out-of-phase.

"Question: And as you explained to me, that design was specifically chosen and evaluated by Cordis because of its improvement in flexibility and deliverability; is that right?

"Answer: That's my understanding.

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"Answer (Continuing): Yes.

"Question: And as result of the improvement in flexibility, it was better received by interventional cardiologists than the Crown had been?

"Answer: That's correct.

"Question: And Cordis ended up making a substantial amount of sales of the BX Velocity in part because interventional cardiologists found it to be more deliverable than the Crown had been?

"Answer: Yes. The BX Velocity and also the balloon platform, which was much more flexible than the earlier platforms we had used for Crown and Mini Crown.

"Question: Is it your understanding that at some point in the discussions that were going on between Dr. Jang and Cordis and J&J, that Dr. Jang made an offer of his stent technology to Cordis J&J?

"Answer: Well, based on the reading the communication yesterday, it seems, yes, he made multiple offers of what he characterized as the best stent in the world.

"Question: Did Cordis ever make a counter-offer?

"Answer: I have no knowledge of that, and I

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did not review any correspondence indicating that. I mean, when you say offer, and use the term negotiation, I think that, to my mind, is a more advanced stage than what I saw in the documents, which was multiple letters from Dr. Jang with three sort of different families of stents over several years, and I did not see anything that began to look like a -- kind of a business proposal or an offer to which we responded. That's all I know.

"Question: Dr. Firth, I'd ask you to take a moment and review what we've marked as Firth Exhibit 5, and tell me if you have ever seen this document before.

"Answer: I have seen it before in preparation for the discussion today.

"Question: Do you have any reason to doubt that this was a memorandum from D. Dalessandro to you and to J. Kula that you received on or about July 8, 1996?

"Answer: I have no reason to doubt it."

(End of videotape deposition.)

MR. DESMARAIS: Your Honor, we would offer now what was referred to as Firth Deposition Exhibit 1 as Boston Scientific Trial Exhibit 3086 and what was referred to as Firth Deposition Exhibit 5 as Boston Scientific Exhibit 3095.

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MR. DISKANT: No objection.

THE COURT: Thank you.

THE DEPUTY CLERK: So marked.

*** (Boston Scientific Exhibits No. 3086 and 3095 were received into evidence.)

MR. DESMARAIS: Ladies and gentlemen, we're now going to role-play a deposition from Mr. Croce, who was the head of the cardiology business at Cordis during the time of his deposition, I think. And my partner, Maxine Graham, will ask the questions.

This is not Mr. Croce. It's someone from our office who's going to play Mr. Croce and Maxine Graham will ask the questions.

And his testimony goes to this issue of the Crown not selling well and the switch to the BX Velocity at Cordis.

MS. GRAHAM: "Question: Good morning, Mr. Croce.

"Answer: Good morning.

"Question: By whom have you been employed?

"Answer: I've been employed by Johnson & Johnson, and I retired January 1st, 2005, just a couple months ago.

"Question: And right prior to your retirement, what was your job title and your job

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responsibilities?
"Answer: I was Company Group Chairman for Johnson & Johnson, and I had worldwide responsibilities for Cordis.
"Of course, in 2004, I was transitioning slowly some of those responsibilities over to my replacement.
"Question: And when did you first get responsibility for Johnson & Johnson's stent business?
"Answer: That was in October of 1995.
"Question: But did there come a time when Cordis introduced your second-generation slotted tube stents of its own?
"Answer: Yes. We came out with a series of products. It was the Crown, Mini Crown, Crossflex LC, but we really didn't have a competitive product until probably the May time frame of 2000, when we came out with BX Velocity. That really was the first, really, I would say, high-quality, second-generation product that was competitive that we introduced. I mean, hindsight, it would have been wonderful if we could have had that in 1998, but we didn't. We had it in the year 2000. And the BX Velocity was quite successful. It garnered 25 to 30 percent market share rather rapidly, and so it was -- put us really back in the game.

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"Question: And at the time the BX Velocity stent was introduced, Cordis' share of the coronary stent market was about 5 percent?
"Answer: Yes, it was.
"Question: Okay. Now, you referred to that as a second-generation stent. Had you also referred to that as a third-generation stent?
"Answer: I referred to it as our first time, our first competitive second-generation stent. Dr. Fischell mentioned third generation. Probably marketing people may have even called it a third generation but, in reality, it was our first successful second-generation flexible stent in the market.
"Question: Okay. And it was a totally different product from the coronary stents that Cordis had offered at that time; correct?
"Answer: Yes. All of them were different all the way through.
"Question: But this one, the BX Velocity, was a totally different product?
"Answer: Yes.
"Question: Of what you introduced up to that time; is that correct?
"Answer: Yes.
"Question: And the BX Velocity stent, I think

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you indicated, was a commercial success?
"Answer: We had 25 to 30-percent market share rather quickly. I think the high water mark was around 32 percent.
"Question: You know that the BX Velocity has improvements in features that the Crown stent does not; correct?
"Answer: Yes.
"Question: Those improvements and features were responsible for having greater impact on the market than the Crown; correct?
"Answer: Yes, that's true."
MR. DESMARAIS: Your Honor, I'd like to at this time just read a stipulation of fact and a discovery response.
THE COURT: All right.
MR. DESMARAIS: Ladies and gentlemen, the parties have agreed to the following for the purposes of this case. I can put it on the Elmo, if it would be easier.
Cordis has made, marketed and sold in the United States BX Velocity, BX Sonic and Cypher coronary stents, the accused coronary stents, and Palmaz Genesis eight-cell N link X stent, seven-cell N link P stent, and eleven-cell Y stent peripheral stents, the accused

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Cordis peripheral stents.
And also Cordis has answered the following question, which is called an Interrogatory, which is binding for the purposes of this case. And I will read that to you now, too.
Does Cordis contend that differences exist in the bare metal stent architectures used in the BX Velocity, BX Sonic, and Cypher stents?
And the answer was no, there are no differences.
With that, your Honor, I will turn it back over to the Cypher side of the case.
THE COURT: All right. Thank you.
MR. CANADA: Good morning, ladies and gentlemen of the jury.
Right now we're going to turn our attention to the Helmus patent, and first up we're going to also be reading in some deposition testimony. We're going to be reading a 30(b)(6) deposition that was taken of a gentleman named Dr. Rob Falotico, who works at Johnson & Johnson. He was one of their principal scientists in working on development of the Cypher product.
Dr. Falotico's deposition was taken in October of last year. He's going to be talking about some of the avenues that Johnson & Johnson went down

EXHIBIT 9

REDACTED IN FULL

EXHIBIT 10